

IN THE CLAIMS:

Please cancel claims 2 and 5. Please amend claims 1, 3, and 4 as follows:

1. (Currently Amended) A device for oxygenating ~~and~~, filtering and controlling the temperature of blood in an extracorporeal circuit comprising a monolithic housing defining first, ~~and~~ second and third interior chambers, the first chamber having a substantially cylindrical shape defining a central position and containing a plurality of microporous ~~filters~~ hollow fibers and having a blood inlet and a blood outlet connected to the first chamber to define a blood flow path along an exterior of the hollow fibers and having a gas inlet and a gas outlet connected to the first chamber to define a gas flow path through the lumens of the hollow fibers, the second chamber being positioned substantially within the central portion of the first chamber and containing a heat exchange surface and having a blood inlet and a blood outlet connected to the second chamber to define a blood flow path through the second chamber adjacent the heat exchange surface, the blood outlet of the second chamber being connected to the blood inlet of the first chamber, the third chamber containing a filtration membrane and having a blood inlet and a blood outlet connected to the ~~second~~ third chamber to define a blood flow path through the filtration membrane, the blood inlet of the ~~second~~ third chamber being connected to receive blood from the blood outlet of the first chamber.

2. (Canceled).

3. (Currently Amended) An integrated device for use in an extracorporeal blood circuit, comprising:

a housing defining a first portion and a second portion, the second portion being substantially ring-shaped and having an inner wall defining a substantially cylindrical opening, the first portion being positioned substantially within the cylindrical opening;

means for oxygenating blood contained within the first portion of the housing, the oxygenating means including a blood inlet and a blood outlet; and

means for filtering oxygenated blood contained within the second portion, the filtering means having a blood inlet connected to receive blood from the blood outlet of the oxygenating means and a blood outlet.

4. (Currently Amended) A monolithic device for use in extracorporeal blood circuit, comprising a housing having a blood oxygenator portion, a heat exchanger portion and an arterial blood filter portion, the blood oxygenator portion having a substantially cylindrical shape defining a central opening and containing a gas exchange membrane and having a blood inlet and a blood outlet defining a blood flow path along a first side of the gas exchange membrane and having a gas inlet and a gas outlet for defining a gas flow path along a second side of the gas exchange membrane, the arterial blood filter portion containing a filtration membrane and having a blood inlet and a blood outlet defining a blood flow path through the filtration membrane, the blood inlet of the arterial blood filter portion being connected to receive blood from the blood outlet of the blood oxygenator portion , the heat exchanger portion being contained substantially within the central opening of the oxygenator portion and having a blood inlet and a blood outlet connected to define a blood flow path through the heat exchanger portion,

the blood outlet of the heat exchanger portion being connected to the blood inlet of the oxygenator portion.

5. (Canceled).